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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,369	02/07/2002	Hisashi Isaka	2002-0217A	7447

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EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 09/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/067,369		ISAKA, HISASHI	
	Examiner		Art Unit	
	Robert Sellers		1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 20-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

Art Unit: 1712

Claims 20-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the election filed August 1, 2003.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The actual presence of compound (a-2) denoted characterized as "if necessary" in claim 1, line 6 is questionable since the conditions of necessity are unclear. More favorable consideration would be given to defining the presence of compound (a-2) as "optionally."

Claim 3, lines 5 and 6 contains the trade name Epolead GT300 and Epolead GT400. Where a trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trade name cannot be used properly to identify any particular material or product.

Art Unit: 1712

A trade name is used to identify a source of goods, and not the goods themselves. Thus, a trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify a species of compound (a-1) having an oxirane ring and, accordingly, the identification is indefinite.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5 and 7-16 are rejected under 35 U.S.C. 102(b) as being anticipated by the Polymer article entitled "Study of lanthanide triflates as new curing initiators for DGEBA" by Castell et al.

Castell et al. discusses lanthanide triflates with a diglycidyl ether of bisphenol A (page 8466, second column, last paragraph). The diglycidyl ether of bisphenol A contains two oxirane rings per molecule embraced by the "polymerizable cyclic ether structures" of compound (a-1) of claim 1 and the "compound having an oxirane ring" of as compound (a-1) of claim 2.

Art Unit: 1712

Claims 1-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT Publication No. WO 00/08087 or the Macromolecular Chemistry and Physics article entitled "Study of lanthanide triflates as new curing initiators for cycloaliphatic epoxy resins" by Mas et al.

Example 4 on page 9 shows a composition comprising 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexanecarboxylate and 1 phr of ytterbium triflate.

Mas et al. describes lanthanide triflates such as ytterbium triflate as a cationic initiator of cycloaliphatic epoxy resins such as 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexanecarboxylate (last IT).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT Publication No. WO 94/09055 in view of PCT Publication No. WO 00/08087 and the Mas et al. article.

PCT '055 sets forth a blend of cyclic ethers such as oxiranes or oxetanes (page 5, lines 22-30) and a catalyst such as the preferred zinc triflate (page 9, lines 9 and 23-25 and page 55, Example 27, line 19) present in an amount of from 0.1-15% by weight (page 12, lines 3-5).

Art Unit: 1712

The claimed polymerizable cyclic structure equivalent weight of compound (A) is not recited. PCT '087 and the Mas et al. article are described hereinabove. It would have been obvious to employ the oxirane of PCT '055 having a particular polymerizable cyclic structure equivalent weight such as the 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexanecarboxylate shown in PCT '087 and Mas et al. in order to take advantage of properties endemic to cycloaliphatic diepoxides such as solvent resistance owing to the cycloaliphatic ring.

Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT '087 and '055 and Mas et al. and Castell et al. articles in view of Kitabatake et al. and Japanese Patent No. 4-359075 and the Proceedings of the International Waterborne, High-Solids, and Powder Coatings Symposium article entitled "Liquid. Sprayable, "zero" VOC coatings utilizing cycloaliphatic epoxies" by Eaton et al.

Claims 17-19 denote the further presence of water which is not recited by the PCT publications and Mas et al. and Castell et al. articles. PCT '087 espouses the formulation of a liquid coating on page 8, line 22.

Kitabatake et al. (col. 4, lines 33-34 and 49-51; col. 5, lines 28-31 and 57), Japanese '075 and the Eaton et al. article disclose aqueous coatings containing cycloaliphatic epoxy resins such as 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexanecarboxylate (Kitabatake et al., col. 4, lines 33-34 and 49-51) along with a curing catalyst (Kitabatake et al., col. 5, line 57).

Art Unit: 1712

It would have been obvious to prepare a particular liquid coating with the polyepoxides of PCT '087 and '055, Mas et al. and Castell et al. in an aqueous form as per Kitabatake et al., Japanese '075 and Eaton et al. in order to eliminate the volatile organic emissions hazardous to the environment.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitabatake et al., Japanese Patent No. 4-359075 and Eaton et al. in view of PCT '087 and '055, Mas et al. and Castell et al.

The references are described in the previous rejection. Kitabatake et al., Japanese '075 and Eaton et al. do not recite the claimed metal triflate.

It would have been obvious to employ the lanthanide, ytterbium or zinc triflate of PCT '087 and '055, Mas et al. and Castell et al. as the curing catalyst for Kitabatake et al., Japanese '075 and Eaton et al. due to the enhanced water tolerance, room temperature stability, solubility within the epoxy resin, and lower toxicity (PCT '087, page 2, lines 22-28).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The other cited Japanese patents refer to mixtures of oxirane and oxetane compounds with cationic initiators.

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9/16/03



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